

OWNER'S MANUAL

- ASSEMBLY
- OPERATION
- MAINTENANCE
- PARTS LIST

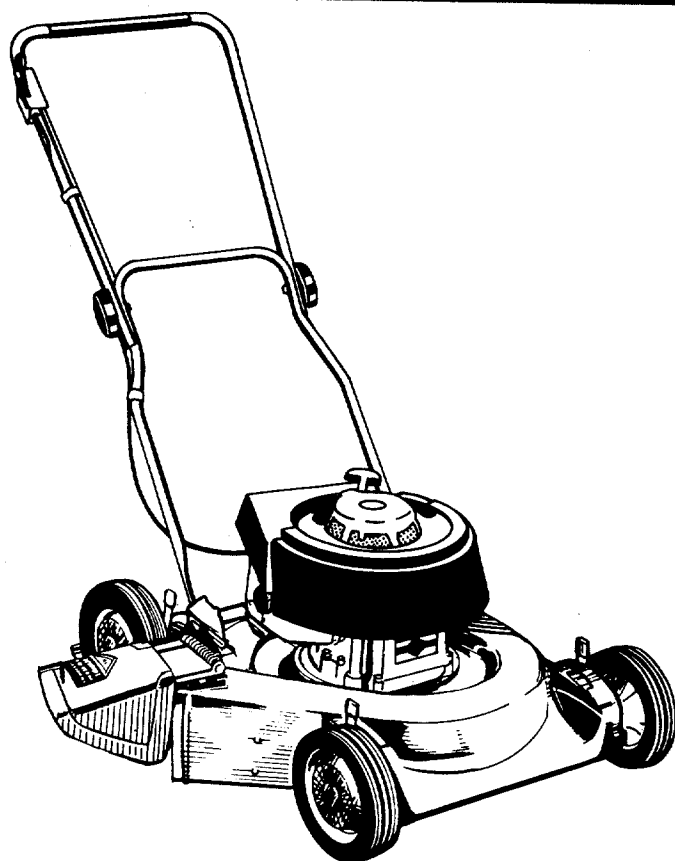
Model Nos.
117-620A
117-620-300

*3 1/2 HP B & S Engine 4 cycle Rewind Start
THROTTLE ON CHROME FOLDING HANDLE
21"
8 x 1.75 STEEL FORTIFLEX BEARINGS
TWIN LINE ON TREAD*

Important:

Read Safety Rules and
Instructions Carefully

21"
**ROTARY
MOWERS**



IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

TRAINING

1. Read the Operating and Service Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power mower. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
3. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower in any direction.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Do not wear loose fitting clothing that could get caught on the mower.
4. Check the fuel before starting the engine. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine.
5. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
6. Never attempt to make a wheel or cutting height adjustment while the engine is running.
7. Mow only in daylight or in good artificial light.
8. Never operate the equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.

OPERATION

1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
3. Stop the blade(s) when crossing gravel drive, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug,

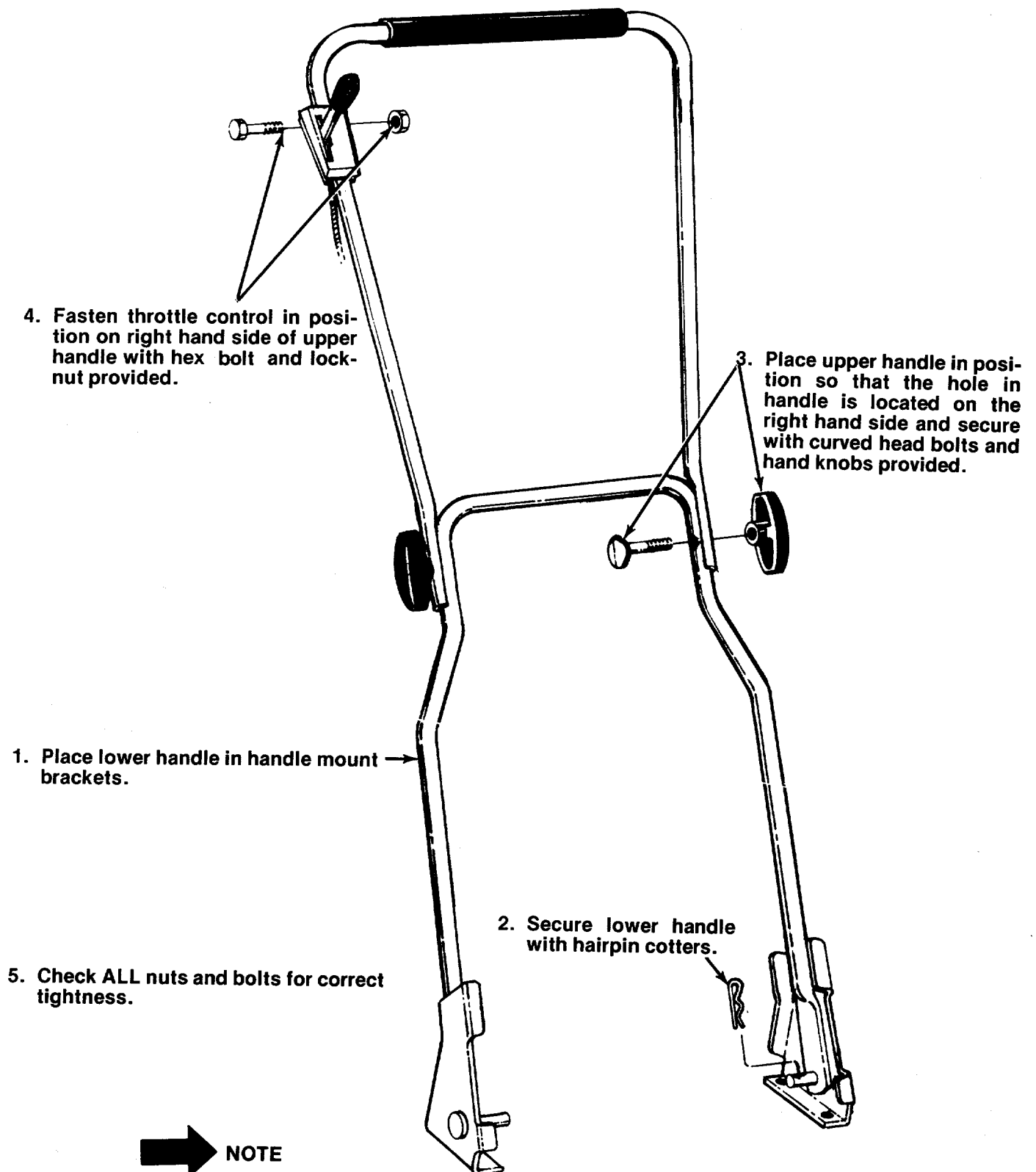
thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Stop the engine whenever you leave the mower, before cleaning the mower housing, and when making any repairs or inspections.
7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
8. Before attempting to unclog the mower or discharge chute, stop the engine and be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
9. Do not run the engine indoors.
10. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
11. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
12. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
13. Never operate mower without proper guards, plates or other safety protective devices in place.
14. Keep washout ports and other mower-housing service openings closed when mowing.

MAINTENANCE AND STORAGE

1. Check the blade and engine mounting bolts at frequent intervals for proper tightness.
2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
3. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
5. Check the grass catcher bag frequently for wear or deterioration. For safety protection replace only with new bag meeting original equipment specifications.

HANDLE ASSEMBLY INSTRUCTIONS



NOTE

It may be necessary to spread the ends of the lower handle outward slightly to assure a snug fit against the bracket mounting area.

ASSEMBLY INSTRUCTIONS FOR OPTIONAL HANDLE

10. Slip hand grips on the upper end of each handle. They will slip on more easily if you first soak them in warm soapy water.

5. Place speed nut on throttle clamp.

4. Assemble throttle clamp to upper handle.

2. Fasten upper handles to lower handle. Fasten with cap screws and locknuts. Do not tighten. Use lower holes only.

NOTE

It may be necessary to bend the ends of the lower handle inward slightly to assure a snug fit against the deck mounting area.

7. Secure top of handle panel to throttle clamp.

3. Secure throttle control to handle panel as shown.

6. Assemble bottom of handle panel to handle.

9. Check ALL nuts and bolts for correct tightness.

8. Secure control wire handle with cable clip.

1. Attach lower handle to wheel brackets. Secure with hair pin cotter.



NOTE

For shipping purposes your mower is set with the wheels in a low cutting height position. For best results raise the cutting position until it is determined which height is best for your lawn. See adjustments.

1. Service engine with gas and oil. See engine manual packed with lawn mower for complete instructions for the care and maintenance of engine. READ DIRECTIONS CAREFULLY.
2. When ready to start engine, place throttle control lever in "START" position and start engine in accordance with instructions in engine manual. After engine starts, move throttle control lever to desired engine speed. The engine is stopped by placing control lever in the "STOP" position.
3. Be sure that lawn is clear of stones, sticks, wire or other objects which could damage lawn mower or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.

ADJUSTMENTS



CAUTION

Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

STANDARD CUTTING HEIGHT

Adjustment may be made by removing and moving wheel studs to desired position. Cutting heights will be raised as wheel studs are moved to a lower hole and lowered as wheel studs are moved to a higher hole in the deck. All wheel studs must be mounted in a relative position to the deck.

EASY CUTTING HEIGHT

An adjusting plate and thumb lever at each wheel position provides cutting height adjustment. Each adjusting plate has five holes. Height of cut will be changed when the thumb lever is moved from one hole to another. Simply depress thumb lever towards wheel and move wheel and lever assembly to desired position. All wheels must be positioned in relative height of cut positions.

THROTTLE

If adjustment becomes necessary, the throttle control wire assembly can be reset as follows:

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine.
2. Move throttle control lever on handle to "FAST" position.
3. Move lever, to which control wire is fastened at engine, to full open position and retighten screw to secure throttle control wire assembly.

LUBRICATION



IMPORTANT

Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

Wheels — Wheel bearings are of self-lubricating Fortiflex. They require no lubrication.

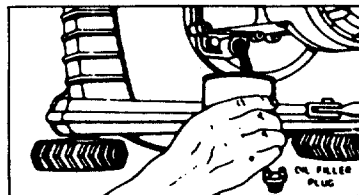
Throttle — Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil (SAE No. 10 or 20) for ease of operation.

Engine — Follow engine manual for lubrication instructions.

Protective Shield — The pivot points on the protective shield should be lubricated periodically with light oil to prevent any rust or binding up.

Chute Deflector — The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding up. Deflector should work freely.

NOTE: FILL AND DRAIN OIL FROM OIL FILL PLUG.



Change oil after first 5 hours of operation, while engine is warm. Thereafter, change oil every 25 hours of operation while engine is warm. Engine may be drained through oil filler opening. Be sure to replace drain plug and oil filler cap.

MAINTENANCE

Cutting Blade — The blade may easily be removed for grinding or replacement as follows:

1. Remove bolt and lockwasher holding blade and blade adapter to engine crankshaft.
2. Remove blade and blade adapter from engine crankshaft.
3. Remove two bolts, lockwashers and nuts holding blade to blade adapter (if necessary).

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

Deck — The underside of the mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.



CAUTION

Do not direct the stream of water at a hot engine, as damage to the engine may result.

HANDLE STORAGE

This model is so equipped to provide easy fold away handle storage.

1. Remove hair pin cotter.
2. Pull ferrule out of the handle.
3. Replace hair pin cotter.
4. Loosen the two plastic knobs on each side, center of handle.
5. Pull inward on the bottom of each side of the lower handle and push forward.
6. Fold the upper handle back and down as shown.

To Take the Handle out of Storage Position.

1. Lift the upper handle up and towards the rear as shown.

USING YOUR ROTARY MOWER

For best results, do not cut wet grass because it tends to stick to underside of the mower thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing. The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion, then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.

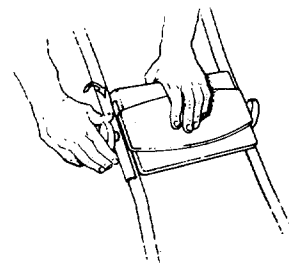
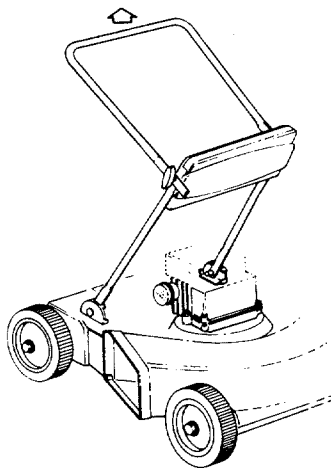
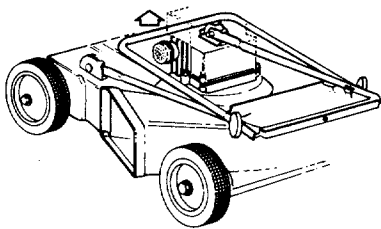
STORAGE

The following steps should be taken to prepare lawn mower for storage:

1. Clean and lubricate mower thoroughly as described in the preceding instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Place blocks under deck to raise tires clear of floor.
5. Store mower in a dry, clean area.

OPTIONAL HANDLE STORAGE

The optional handle may be put in a storage position by pressing inward on the lower handle and moving it forward. To put the handle back into the operating position simply pull the handle back. It will lock automatically.



NOTE

The manufacturer **DOES NOT** recommend the use of any accessory on this rotary mower other than those manufactured by MTD Products Inc.

GRASS CATCHER Model No. 197-003A is available as optional equipment for the mowers shown in this manual.



WARNING

1. The mower should not be operated without the entire grass catcher or chute deflector in place.
2. The mower should not be operated without the protective shield on the rear of the deck in place.



NOTE:

Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

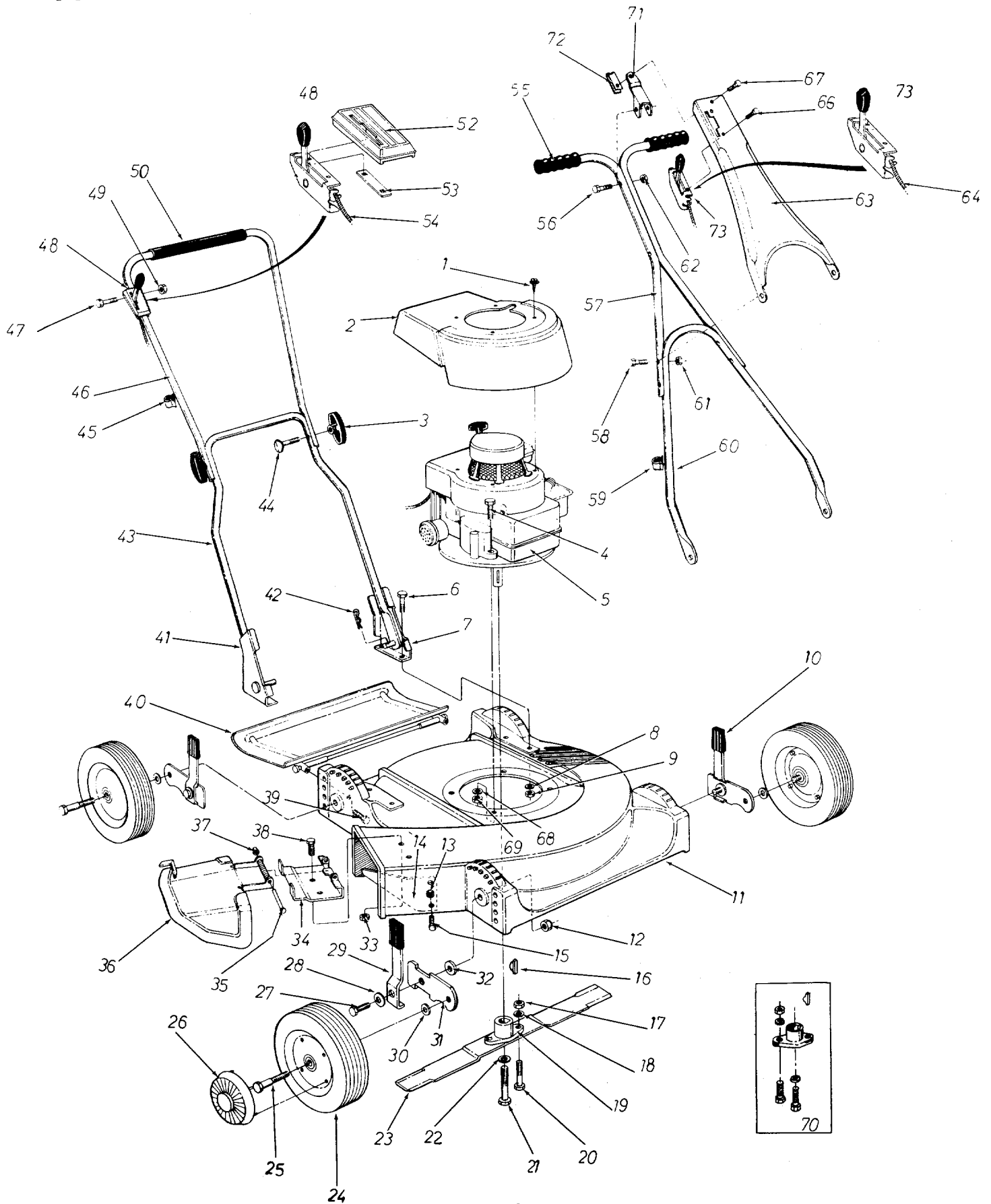
For replacement bags, use only factory authorized replacement bag No. 764-0119.



IMPORTANT

After striking a foreign object, stop the engine, remove wire from spark plug. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

117-620A



PARTS LIST FOR MODEL 117-620A

Ref. No.	Part No.	Color Code	Description	New Part	Ref. No.	Part No.	Color Code	Description	New Part
1	710-0227		Hex Self Tap Scr. #8 x .50" Lg.*		38	710-0252		Hex Scr. 1/4-20 x .75" Lg.*	
2	731-0275		Engine Shroud		39	710-0567		Hex Scr. 1/4-28 x .62" Lg.*	
3	09966		Hand Knob		40	11199 —462		Rear Protective Shield Ass'y.	
4	710-0409		Hex Scr. 5/16-24 x 1.75" Lg.*		41	12928		Handle Mount Brkt.—R.H.	
5	—		Engine		42	714-0104		Hair Pin Cotter	
6	710-0252		Hex Scr. 1/4-20 x .75" Lg.*		43	749-0104		Lower Handle	
7	12927		Handle Mount Brkt.—L.H.		44	710-0405		Curved Hd. Bolt 5/16-18 x 1.75" Lg.	
8	736-0329		L-Wash. 1/4" Scr.*		45	746-0128		Cable Clip	
9	712-0287		Hex Nut 1/4-20 Thd.*		46	11204		Upper Handle	
10	07520		Knob		47	710-0606		Hex Scr. 1/4-20 x 1.50" Lg.*	
11	11673 —462		Deck Ass'y.—Comp.		48	746-0234		Throttle Control Ass'y.—Comp.	
12	712-0214		Elastic L-Nut 3/8-24 Thd.		49	712-0107		Hex Cent. L-Nut 1/4-20 Thd.	
13	712-0287		Hex Nut 1/4-20 Thd.*		50	718-0143		Grip	
14	12270 —462		Internal Bar		52	731-0344		Plastic Label	
15	710-0252		Hex Scr. 1/4-20 x .75" Lg.*		53	726-0134		Speed Nut #8-32—Twin Type	
16	714-0365		#6 Hi-Pro Key 5/32" x 5/8" Dia.		54	746-0174		Conduit and Wire	
17	712-0123		Hex Nut 5/16-24 Thd.*		55	720-0157		Grip†	
18	736-0119		L-Wash. 5/16" Scr.*		56	710-0136		Hex Scr. 1/4-20 x 1.75" Lg.*†	
19	10769		Blade Adapter Kit		57	09354		Upper Handle†	
20	710-0672		Hex Scr. 5/16-24 x 1.25" Lg. H.T.		58	710-0606		Hex Scr. 1/4-20 x 1.50" Lg.*†	
21	710-0539		Hex Scr. 3/8-24 x 1.75" Lg. H.T.		59	746-0128		Cable Clip†	
22	736-0217		L-Wash. 3/8" Scr.* H.D.		60	09359		Lower Handle†	
23	742-0124		21" Blade		61	712-0107		Hex Cent. L-Nut 1/4-20 Thd.†	
24	734-0643		Wheel Ass'y.—Comp.—8 x 1.75		62	712-0107		Hex Cent. L-Nut 1/4-20 Thd.†	
25	710-0347		Axle Bolt		63	11604		Handle Panel†	
26	731-0124		Hub Cap		64	746-0229		Conduit and Wire†	
27	710-0191		Hex Scr. 3/8-24 x 1.25" Lg.		66	710-0227		Hex Self Tap Scr. #8-32 x .50" Lg.†	
28	736-0105		Belleville Wash.		67	710-0192		Truss Mach. Scr. #10-24 x .38" Lg.†	
29	08835		Spring Lever with Knob		68	736-0119		L-Wash. 5/16" Scr.*	
30	736-0105		Belleville Wash.		69	712-0123		Hex Nut 5/16-24 Thd.*	
31	07492		Pivot Bar		70	10769		Blade Adapter Kit	
32	736-0133		Washer 3/8" I.D.		71	07861		Control Clamp†	
33	712-0107		Hex Cent. L-Nut 1/4-20 Thd.		72	712-0526		Speed Nut†	
34	11130 —462		Adapter Plate		73	11597		Throttle Control Ass'y.—Comp.†	
35	711-0555		Pivot Pin		74	12626		Spacer	
36	11683 —462		Chute Deflector Ass'y.						
37	726-0106		Push-on Flange Palnut						

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts if color or finish is important, use color code shown at left. (e.g. Red Flake Finish—11673 (462).)

†Optional Handle and Throttle Control

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines — Gasoline."



PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts numbers, description of parts and the quantity of each part required.

ALABAMA	BIRMINGHAM	
	Auto Electric & Carburetor Co.	2625 4th Ave. S. 35233
ARKANSAS	NORTH LITTLE ROCK	
	Sutton's Lawn Mower Shop	Rt. 4, Box 368 72117
	FORT SMITH	
	Mity Mite Motors, Inc.	2515 Towson Ave. 72901
CALIFORNIA	SAN BERNARDINO	
	Lawn Mower Supply Co.	25608 E. Baseline 92410
	SAN FRANCISCO	
	J.W. Jewett Co.	981 Folsom St. 94107
	SACRAMENTO	
	Luttig & Severson	2030 28th St. 95818
COLORADO	DENVER	
	South Denver Lawn Equip.	527 West Evans 80223
CONNECTICUT	SUFFIELD	
	The Jones & Ramsey Co.	850 Thompsonville Rd. 06078
FLORIDA	JACKSONVILLE	
	Radco Distributors	2403 Market St. 32206
	CORAL GABLES	
	Mox-All of Florida, Inc.	365 Greco Ave. 33146
GEORGIA	EAST POINT	
	East Point Cycle & Key	2834 Church St. 30344
ILLINOIS	LYONS	
	Keen Edge Co.	8615 Ogden Ave. 60534
INDIANA	ELKHART	
	Parts & Sales Inc.	2101 Industrial Pkwy. 46514
IOWA	DUBUQUE	
	Power Lawn & Garden Equip.	2551 J.F. Kennedy 52001
KANSAS	WICHITA	
	Hixon, Inc.	3030 Mascot 67204
LOUISIANA	NEW ORLEANS	
	Suhren Engine Co.	8330 Earhart Blvd. 70118
MARYLAND	TAKOMA PARK	
	Center Supply Co.	6867 New Hampshire Ave. 20012
MASSACHUSETTS	SPRINGFIELD	
	Morton B. Collins Co.	300 Birnie Ave. 01107
MICHIGAN	MOUNT CLEMENS	
	Power Equipment Dist.	36463 South Gratiot... 48043
	LANSING	
	Lorenz Service Co.	2500 S. Pennsylvania.. 48900
MINNESOTA	MINNETONKA	
	Hance Distributing Inc.	11212 Wayzata Blvd. 55343
MISSISSIPPI	BILOXI	
	Biloxi Sales & Service, Inc.	506 Caillavet St. 39533
MISSOURI	KANSAS CITY	
	Automotive Equip. Service	3117 Holmes St. 64109
	ST. LOUIS	
	Henzler, Inc.	2015 Lemay Ferry Rd. 63125
NEW YORK	CARTHAGE	
	Gamble Dist., Inc.	West End Ave. 13619
	SYRACUSE	
	Kimber's, Inc.	115 N. Geddes St. 13204

BRIGGS & STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing *Engines Gasoline*, Briggs & Stratton or Tecumseh Lauson

NORTH CAROLINA	GREENSBORO	
	Dixie Sales Company	327 Battleground Ave.. 27402
	GOLDSBORO	
	Smith Hardware Co.	515 N. George St. 27530
OHIO	WADSWORTH	
	National Central	687 Seville Rd. 44281
	CLEVELAND	
	Bleckrie, Inc.	7900 Lorain Ave. 44102
	CARROL	
	Stebe's Mid-State Mower Supply Box 366	43112
	WILLARD	
	Sunshine Wholesale Tire Outlet Route 224	44890
	MANSFIELD	
	McClure Lawn & Garden Supply	1114 Lexington Ave. . 44903
OKLAHOMA	MUSKOGEE	
	Victory Motors, Inc.	605 S. Cherokee 74401
	ADA	
	Ada Auto Supply	301 E. 12th St. 74820
OREGON	PORTLAND	
	Kenton Supply Co.	8216 N. Denver Ave. . 97217
PENNSYLVANIA	LANCASTER	
	Raub Supply Co.	James & Mulberry Sts... 17604
	PITTSBURGH	
	Bluemont Co.	11125 Frankstown Rd.. 15235
TENNESSEE	KNOXVILLE	
	Master Repair Service	2423 Broadway, N.E. 37917
	MEMPHIS	
	Memphis Cycle & Supply Co.	421 Monroe Ave. 38103
	American Sales & Service, Inc.	1922 Lynnbrook 38116
TEXAS	DALLAS	
	Marr Brothers, Inc.	423 E. Jefferson 75203
	HOUSTON	
	Bullard Supply Co.	2409 Commerce St. 77003
	SAN ANTONIO	
	Catto & Putty, Inc.	P.O. Box 2408 78206
	FORT WORTH	
	Woodson Sales Corp.	1702 N. Sylvania 76111
UTAH	SALT LAKE CITY	
	A-1 Engine & Mower Co.	437 E. 9th St. 84111
VERMONT	BURLINGTON	
	Vermont Appliance Co.	44 Lakeside Ave. 05401
VIRGINIA	RICHMOND	
	RBI Corp.	963 Myers St. 23260
WASHINGTON	SEATTLE	
	Bailey's Rebuild, Inc.	1325 E. Madison St. ... 98102
WEST VIRGINIA	CHARLESTON	
	Young's, Inc.	233 Virginia St., E. ... 25301
WISCONSIN	APPLETON	
	Automotive Supply Co.	123 S. Linwood Ave. 54911

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.